

Title (en)  
Cyclohexane derivatives and their use as components for liquid crystals.

Title (de)  
Cyclohexanderivate und ihre Verwendung als Komponenten Flüssigkristalliner-Dielektrika.

Title (fr)  
Dérivés du cyclohexane et leur application comme composants de cristaux liquides.

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Application  
**EP 83107798 A 19830808**

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Abstract (en)  
[origin: US4510069A] Cyclohexane derivatives of formula I R<sup>1</sup>-(A<sup>1</sup>)<sub>m</sub>-Z<sup>1</sup>-A-Z<sup>2</sup>-(A<sup>2</sup>)<sub>n</sub>-R<sup>2</sup> I wherein R<sup>1</sup> and R<sup>2</sup> are each H, an alkyl group which has 1-10 C atoms and in which one or two CH<sub>2</sub> groups can also be replaced by O atoms, F, Cl, Br, CN or -O-COR, A<sup>1</sup> and A<sup>2</sup> are each 1,4-phenylene, 1,4-cyclohexylene, 1,3-dioxane-2,5-diyl, piperidine-1,4-diyl, 1,4-bicyclo(2,2,2)-octylene or pyrimidine-2,5-diyl groups which are unsubstituted or substituted by 1-4 F atoms, A is a 1,4-cyclohexylene group which is substituted in the 1-position and/or 4-position by alkyl, alkoxy, fluorinated alkyl or fluorinated alkoxy, each of which has 1-5 C atoms, F, Cl, Br and/or CN and which can also carry 1 or 2 further F, Cl or Br atoms and/or CN groups, Z<sup>1</sup> and Z<sup>2</sup> are each -CO-O-, -O-CO-, -CH<sub>2</sub>CH<sub>2</sub>-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O- or a single bond, R is an alkyl group which has 1-5 C atoms, m is 1 or 2 and n is 0 or 1, it being possible, where m=2, for the two groups A<sup>1</sup> to be identical or different from one another; and the acid addition salts of those compounds which are basic, are suitable for use as components of liquid-crystal dielectrics.

Abstract (de)  
Cyclohexanderivate der Formel I R<sup>1</sup>-(A<sup>1</sup>)<sub>m</sub>-Z<sup>1</sup>-A-Z<sup>2</sup>-(A<sup>2</sup>)<sub>n</sub>-R<sup>2</sup> I worin R<sup>1</sup> und R<sup>2</sup> jeweils H, eine Alkylgruppe mit 1 - 10 C-Atomen, worin auch eine oder zwei CH<sub>2</sub>-Gruppen durch O-Atome ersetzt sein können, F, Cl, Br, CN oder -O-COR, A<sup>1</sup> und A<sup>2</sup> jeweils unsubstituierte oder durch 1 - 4 F-Atome substituierte 1,4-Phenyl-, 1,4-Cyclohexyl-, 1,3-Dioxan-2,5-diyl-, Piperidin-1,4-diyl-, 1,4-Bicyclo(2,2,2)-octyl-, oder Pyrimidin-2,5-diylgruppen, A eine in 1- und/oder 4-Stellung durch Alkyl, Alkoxy, fluoriertes Alkyl oder fluoriertes Alkoxy mit jeweils 1 - 5 C-Atomen, F, Cl, Br und/oder CN substituierte 1,4-Cyclohexylengruppe, die 1 oder 2 weitere F-, Cl- oder Br-Atome und/oder CN-Gruppen tragen kann, Z<sup>1</sup> und Z<sup>2</sup> jeweils -CO-O-, -O-CO-, -CH<sub>2</sub>CH<sub>2</sub>-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O- oder eine Einfachbindung, R eine Alkylgruppe mit 1 - 5 C-Atomen, m 1 oder 2 und n 0 oder 1 bedeuten, wobei für m = 2 die beiden Gruppen A<sup>1</sup> gleich oder voneinander verschieden sein können, sowie die Säureadditionssalze der basischen unter diesen Verbindungen eignen sich zur Verwendung als Komponenten flüssigkristalliner Dielektrika.

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Cited by  
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